

IN THE CLAIMS

This listing of claims will replace all prior versions, and listings, of claims in the application:

Listing of Claims:

1. (Currently amended) A method of optimizing at least two target machines, comprising the steps of:

abstracting a rule of instruction scheduling for each of said at least two target machines;

generating a hypothetical machine based on said rule of instruction scheduling for each of said at least two target machines instructions; and

targeting said hypothetical machine.

2. (Currently amended) The method of claim 1 wherein a different rule of instruction scheduling for said hypothetical machine is a restrictive set of said ~~abstracted rules~~ rule of instruction scheduling for each of said at least two target machines.

3. (Currently amended) The method of claim 1 further including the steps of: detecting a conflict between said rule of instruction scheduling for each of said at least two target machines abstracted rules of instructions; and resolving said conflict.

4. (Currently amended) The method of claim 3 wherein said step of resolving said conflict includes ~~the~~ a step of selecting ~~the~~ a less damaging option ~~for~~ of said detected conflict.

5. (Currently amended) The method of claim 3 wherein said detected conflict corresponds to [[a]] an inherent conflict between said rule of instruction scheduling for each of said at least two target machines ~~a rule of instruction of one of said at least two target machines and a rule of instruction of another of said at least two target machines~~.

6. (Original) The method of claim 1 further including the steps of:
modeling each of said at least two target machines; and
retrieving scheduling information corresponding to each of said at least two target machines.

7. (Original) The method of claim 1 wherein said at least two target machines include an UltraSPARC-II configured to operate at a speed of 360 MHz and an UltraSPARC-III configured to operate at a speed of 600 MHz.

8. (Currently amended) A method of optimizing at least two target machines, comprising the steps of:
retrieving scheduling information corresponding to each of said at least two target machines;
abstracting a rule of instruction scheduling for each of said at least two target machines;

generating a hypothetical machine based on said rule of instruction scheduling for each of said at least two target machines instructions; and targeting said hypothetical machine.

9. (Currently amended) The method of claim 8 further including the steps of: detecting a conflict between said rule of instruction scheduling for each of said at least two target machines abstracted rules of instructions; and resolving said conflict.

10. (Currently amended) The method of claim 9 wherein a different rule of instruction scheduling for said hypothetical machine is a restrictive set of said rule abstracted rules of instruction scheduling for each of said at least two target machines.

11. (Currently amended) The method of claim 9 wherein said step of resolving said conflict includes ~~the~~ a step of selecting ~~the~~ a less damaging option for ~~of~~ said detected conflict.

12. (Currently amended) The method of claim 9 wherein said detected conflict corresponds to [[a]] an inherent conflict between [[a]] said rule of instruction for each of said at least two target machines ~~of one of said at least two target machines and a rule of instruction of another of said at least two target machines~~.

13. (Currently amended) An apparatus for optimizing at least two target machines, comprising:

means for abstracting a rule of instruction scheduling for each of said at least two target machines;

means for generating a hypothetical machine based on said rule of instruction scheduling for each of said at least two target machines instructions; and means for targeting target said hypothetical machine.

14. (Currently amended) The apparatus of claim 13 wherein a different rule of instruction scheduling for said hypothetical machine is a restrictive set of said rule abstracted rules of instruction scheduling for each of said at least two target machines.

15. (Currently amended) The apparatus of claim 13 further including:
means for detecting a conflict between said rule of instruction scheduling for each of said at least two target machines abstracted rules of instructions; and means for resolving said conflict.

16. (Currently amended) The apparatus of claim 15 wherein said resolving means includes means for selecting ~~the a~~ less damaging option for ~~of~~ said detected conflict.

17. (Currently amended) The apparatus of claim 15 wherein said detected conflict corresponds to [[a]] an inherent conflict between said rule of instruction scheduling for each of said at least two target machines a rule of instruction of one of said at least two target machines and a rule of instruction of another of said at least two target machines.

18. (Original) The apparatus of claim 13 further including:
means for modeling each of said at least two target machines; and

means for retrieving scheduling information corresponding to each of said at least two target machines.

19. (Currently amended) An apparatus for optimizing at least two target machines, comprising:

means for retrieving scheduling information corresponding to each of said at least two target machines;

means for abstracting a rule of instruction scheduling for each of said at least two target machines;

means for generating a hypothetical machine based on said rule of instruction scheduling for each of said at least two target machines instructions; and

means for targeting said hypothetical machine.

20. (Currently amended) An apparatus for optimizing a plurality of target machines, comprising:

means for modeling a plurality of target machines;

means for retrieving scheduling information corresponding to each of said plurality of target machines;

means for abstracting a rule of instruction scheduling for each of said plurality of target machines;

means for generating a hypothetical machine based on said rule of instruction scheduling for each of said plurality of target machines instructions;

means for targeting said hypothetical machine;

means for detecting a conflict between said rule of instruction scheduling for each of said plurality of target machines abstracted rules of instructions; and

means for resolving said conflict.